C2
8/31/84
Not RCRA
156081

EPA Air # 135807AAB

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION
01 STATE: ILD | 02 SITE NUMBER: 980606941

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site): Eagle Zinc Co. Div of T.L. Diamond (in ERRIS as [illegible])	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER: Road 1200E Smith + Rte. 16E
03 CITY: Hillsboro	04 STATE: IL; 05 ZIP CODE: 62049; 06 COUNTY: Montgomery; 07 COUNTY CODE: 135; 08 CONG DIST: 21
09 COORDINATES LATITUDE: 39 09 45.0; LONGITUDE: 089 29 00.0	Hillsboro Quad (202B)

10 DIRECTIONS TO SITE (Starting from nearest public road): See Attached Map

III. RESPONSIBLE PARTIES

01 OWNER (If known): T. L. Diamond & Co Inc	02 STREET (Business, mailing, residential): Unknown
03 CITY: New York	04 STATE: NY; 05 ZIP CODE: Unk; 06 TELEPHONE NUMBER: ( ) Unk.
07 OPERATOR (If known and different from owner): Eagle Zinc Co.	08 STREET (Business, mailing, residential): P.O. Box 340
09 CITY: Hillsboro	10 STATE: IL; 11 ZIP CODE: 62049; 12 TELEPHONE NUMBER: (217) 532-3971

13 TYPE OF OWNERSHIP (Check one)
☒ A. PRIVATE ☐ B. FEDERAL: ______ (Agency name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER: ______ (Specify) ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)
☐ A. RCRA 3001 DATE RECEIVED: __/__/__ (MONTH DAY YEAR) ☒ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: 6/8/81 (MONTH DAY YEAR) ☐ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION
☒ YES DATE 2/18/81 (MONTH DAY YEAR) 7-3-84
☐ NO
BY (Check all that apply): ☐ A. EPA ☐ B. EPA CONTRACTOR ☒ C. STATE ☐ D. OTHER CONTRACTOR ☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: ______ (Specify)
CONTRACTOR NAME(S): ______

02 SITE STATUS (Check one): ☒ A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN
03 YEARS OF OPERATION: 1914 (BEGINNING YEAR) | Present (ENDING YEAR) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
Heavy Metals (Toxic/Persistant)

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
Ground Water (Population/Enviroment)
Surface Water (Poputation/Enviroment)

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)
☐ A. HIGH (Inspection required promptly) ☒ B. MEDIUM (Inspection required) ☐ C. LOW (Inspect on time available basis) ☐ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)		03 TELEPHONE NUMBER
M. A. Dodd	Eagle Zinc		(217) 532-3971
04 PERSON RESPONSIBLE FOR ASSESSMENT	**05 AGENCY**	**06 ORGANIZATION**	**07 TELEPHONE NUMBER** / **08 DATE**
Richard Lange	IEPA	DLPC	(217) 782-9851 / 08/31/84

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
ILD	980606941

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- ✓ A SOLID
- ✓ B POWDER, FINES
- C SLUDGE
- D OTHER (Specify)
- E SLURRY
- F LIQUID
- G GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

- TONS
- CUBIC YARDS: unknown
- NO OF DRUMS

03 WASTE CHARACTERISTICS (Check all that apply)

- ✓ A TOXIC
- B CORROSIVE
- C RADIOACTIVE
- ✓ D PERSISTENT
- E SOLUBLE
- F INFECTIOUS
- G FLAMMABLE
- H IGNITABLE
- I HIGHLY VOLATILE
- J EXPLOSIVE
- K REACTIVE
- L INCOMPATIBLE
- M NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	unknown		

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

IEPA Files (Air, Water, Land)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: ILD | 02 SITE NUMBER: 980606941

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] A. GROUNDWATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 1500
02 [ ] OBSERVED (DATE ____) [X] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION
Outside storage of large quantities of Zinc & Lead bearing ore. No control of perculation.
See Attachments A & B

01 [X] B. SURFACE WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 4500
02 [X] OBSERVED (DATE: 3-23-82) [ ] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION
Levels of Zn & Fe above Rule 203(f) as stated in Attachment B, Hillsboro intake in affected area

01 [ ] C. CONTAMINATION OF AIR
03 POPULATION POTENTIALLY AFFECTED: ____
02 [ ] OBSERVED (DATE ____) [ ] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION

01 [ ] D. FIRE/EXPLOSIVE CONDITIONS
03 POPULATION POTENTIALLY AFFECTED: ____
02 [ ] OBSERVED (DATE ____) [ ] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION

01 [ ] E. DIRECT CONTACT
03 POPULATION POTENTIALLY AFFECTED: ____
02 [ ] OBSERVED (DATE ____) [ ] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION

01 [X] F. CONTAMINATION OF SOIL
03 AREA POTENTIALLY AFFECTED: > 25 (Acres)
02 [X] OBSERVED (DATE: 12-14-82) [ ] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION
See Attachment A

01 [X] G. DRINKING WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: > 6000
02 [ ] OBSERVED (DATE ____) [X] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION
Shallow and deep well sources for potable water & Surface Intakes See A & B above

01 [ ] H. WORKER EXPOSURE/INJURY
03 WORKERS POTENTIALLY AFFECTED: ____
02 [ ] OBSERVED (DATE ____) [ ] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION

01 [ ] I. POPULATION EXPOSURE/INJURY
03 POPULATION POTENTIALLY AFFECTED: ____
02 [ ] OBSERVED (DATE: ____) [ ] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
ILD	980606941

II. HAZARDOUS CONDITIONS AND INCIDENTS *(Continued)*

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION *(Include name(s) of species)*

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES *(Spills runoff standing liquids, leaking drums)* — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

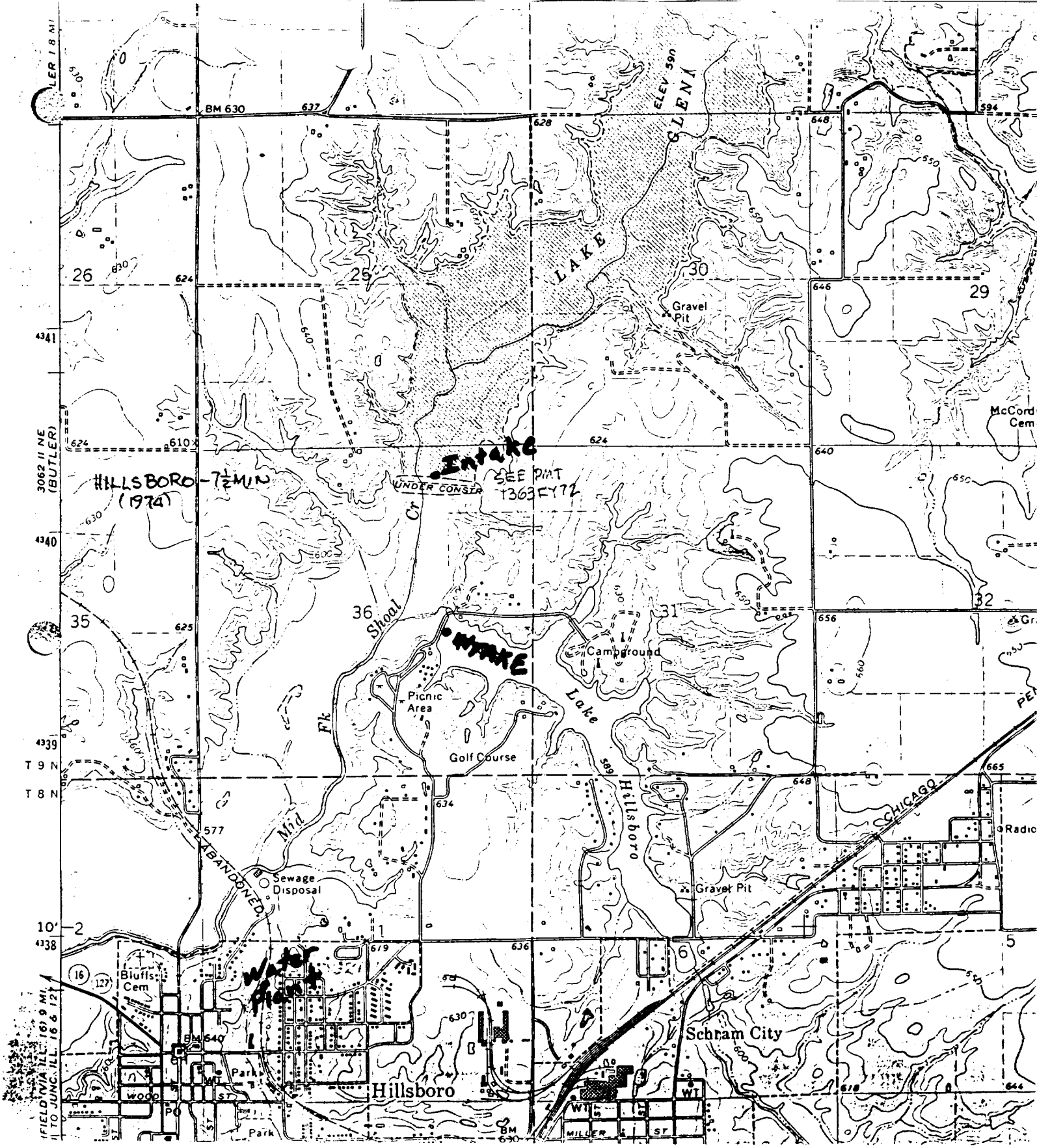
05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

V. SOURCES OF INFORMATION *(Cite specific references, e. g., state files, sample analysis, reports)*

IEPA Files (Air, Water, Land)


HILLSBORO-7½MIN
(1974)
INTAKE
SEE PIT
T363 FY72
UNDER CONSTR
LAKE GLENN
ELEV 590
Gravel Pit
McCord Cem
Shoal Cr
Mid Fk
Hillsboro Lake
Campground
Picnic Area
Golf Course
Sewage Disposal
ABANDONED
CHICAGO
Radio
Gravel Pit
Water Plant
Bluffs Cem
Hillsboro
Schram City
Park
WOOD ST
MILLER ST
PO
BM 630
BM 640
BM 630
T 9 N
T 8 N
3062 II NE (BUTLER)
TO JUNC. ILL. 16 & 127

EXECUTIVE SUMMARY

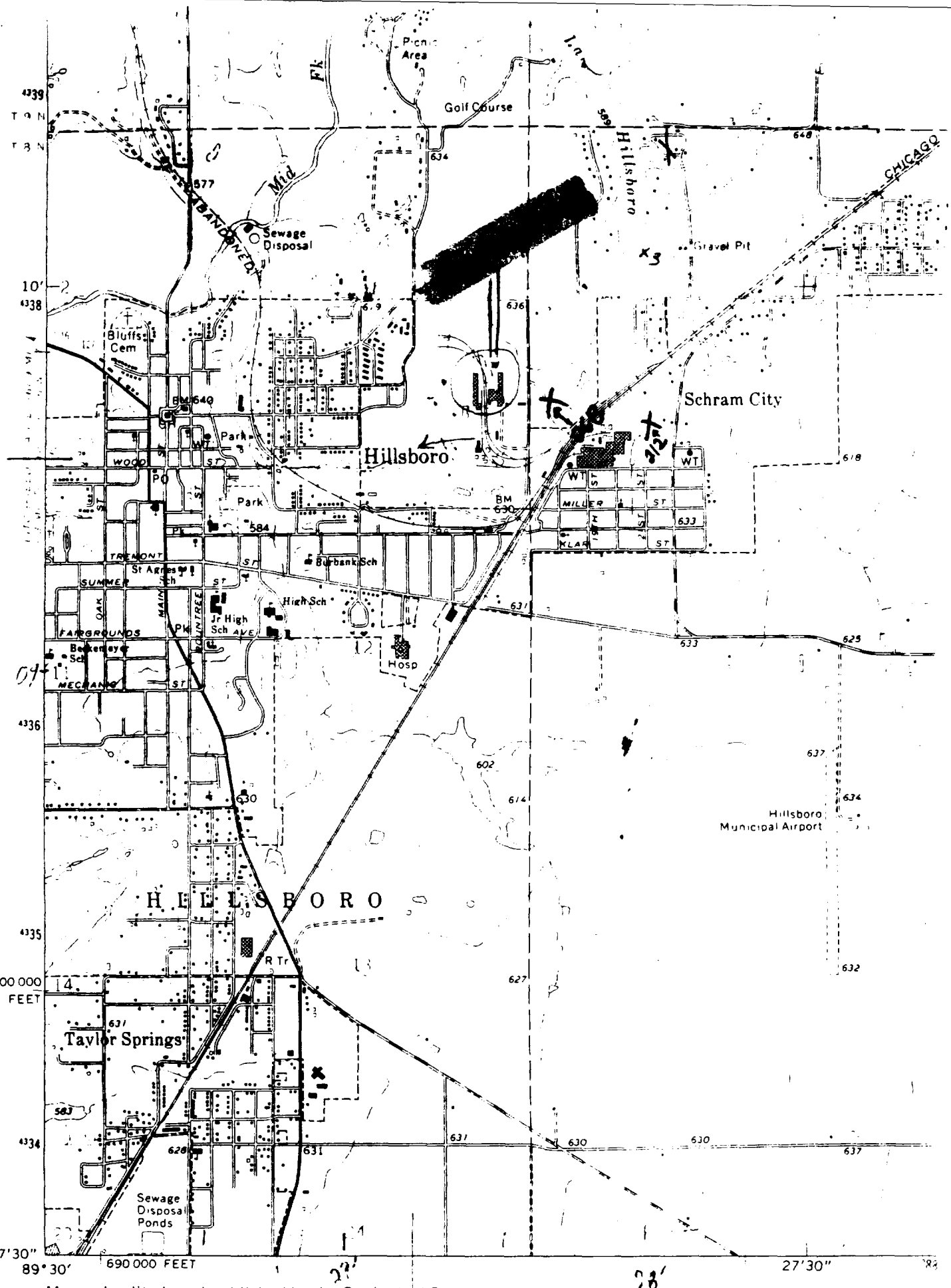
Eagle Zinc Company is involved in the manufacture of zinc oxide from high zinc bearing ore. The resulting zinc oxide is used as a paint pigment. Eagle Zinc, a division of T. L. Diamond, purchased this site as of 3/15/84 from Sherwin-Williams who purchased the facility from Eagle Pitcher in November 1980. During Eagle Pitcher's ownership and also during Sherwin-Williams' lead bearing ore was also processed for the production of lead oxide pigment.

The zinc and lead ores used in these processes have been stockpiled outside in uncontrolled storage and herein lies the problem. The major percentage of surface water appears to feed into an onsite pond which discharges into a tributary of Shoal Creek. The Shoal Creek system is utilized by the City of Hillsboro for its water supply and a fairly large rural population are dependent on groundwater.

During 1983 a cleanup of the ore stockpiles was undertaken by Sherwin-Williams but little or no attention was paid to the sludges in the pond or to groundwater quality. It is unknown to this author if the surface cleanup was completed and if so how effective it was.

A medium priority has been assigned to this site. It is felt that particular attention should be paid to the quality of Sherwin-Williams' cleanup and the material which probably exists in the sediments of the on site pond. Monitoring wells should be advised with testing for priority pollutants.

RL:mkb:S/36



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(SORENTO NORTH) 3062 II SE

Mapped, edited, and published by the Geological Survey

Control by USGS and NOS/NOAA

Topography by photogrammetric methods from aerial photographs taken 1973. Field checked 1974

Projection and 10,000-foot grid ticks: Illinois coordinate

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

Attachment A

MEMORANDUM

DATE: May 4, 1983

TO: Field Operations Section & Records Unit/DWPC

FROM: John J. Forneris, Manager, Region 5, FOS/DWPC JJF

SUBJECT: Sherwin-Williams, Inc. (Montgomery Co, Hillsboro) - Meeting Regarding Waste Material Disposal Program

Accompanied by: T. R. Kluge, Region 5, FOS/DWPC

Attendees: See attachment

As a follow up to our meeting of December 14, 1982, regarding a needed pollution abatement program for the Sherwin-Williams zinc processing plant at Hillsboro and a letter from Dr. A. K. Nanda, Vice President and Director of Manufacturing, dated 3/28/83, a meeting was held on the above date at the Hillsboro plant site to review what improvements had been made to date to abate their pollution problem and what was included in their continuing abatement program.

During the meeting we were advised that approximately 36 million pounds (26,500,000 lb. of muffle dross, 1,200,000 lb. of mixed furnace charge, and 8,200,000 lb. of oversize material) or 17,963 tons of material was removed from 10 acres on the site as of 4/30/83. It is planned to finish the major removal in two weeks of an additional 8 or 9 million pounds on a 2 to 3 acre site. The attached map shows the general areas of material removal as of 4/30/83. The material removed is trucked to Granite City where 3 million pounds per shipment is sent by barge to St. Joe Minerals, Manacoa, Penn. where it requires special electric furnaces to recover the remaining zinc from the feedstock (muffle dross). The areas cleared are covered with dirt available on the existing property.

The process at this plant involves making ZnO using soft and anthracite coal with the ore in Weatheral grate furnaces.

It is estimated that there is a total of 25 acres of zinc material on the premises. Ten to thirteen acres are high in zinc (muffle dross). Twelve acres is secondary feedstock which can be used at the Hillsboro plant or can be sold to others. It contains 20% zinc, 0.2% iron and some silicon carbon; it contains no lead or manganese. It is now being blended into the current operation. It is felt

that the zinc in this material is tied to the carbon and silica and will not leach out since it's not soluable in water. A leach test to confirm this however has not been conducted.

Pictures of the total property area were taken during this visit and are on file in this office. When removal of the remaining 3 acres is complete, a sampling survey of the adjoining streams will be coordinated with Sherwin-Williams to see what degree of abatement has been achieved by the work accomplished to date.

Attachment

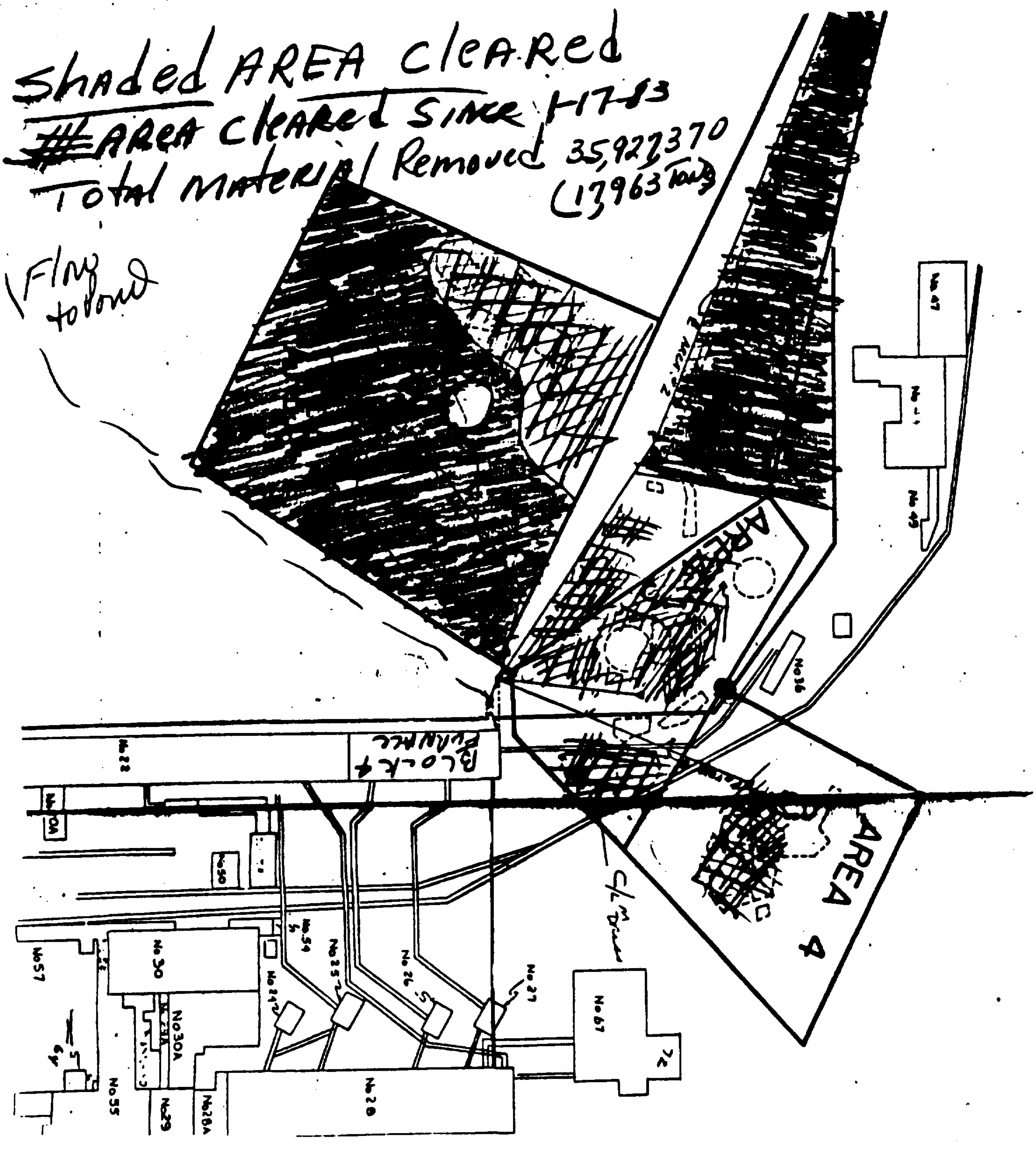
JJF/bp
6-16-83

cc: Region 5, Springfield
T. R. Kluge, Permits

AREA No 1 APPROX 4 ACRES cleared 1-17-83
Removed 7500 TONS 5-3-83

AREA No 2 APPROX 3 ACRES cleared
Removed 4000 TONS

Shaded AREA cleared
AREA cleared since 1-17-83
Total material Removed 35,927,370
(17,963 Tons)



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

Attachment B

MEMORANDUM

DATE: March 23, 1982

TO: Field Operations Section & Records Unit/DWPC

FROM: Timothy R. Kluge, Region V Springfield, FOS/DWPC TK

SUBJECT: Sherwin-Williams Chemical Company (Hillsboro, Montgomery County) -- Wastewater Discharge Reconnaissance Inspection

Interviewed: Pete Meehan, General Manager
Dave Lewis, Site Manager
Rich Mulcahy, Former Site Manager

On the above date, I revisited the Sherwin-Williams site to collect additional samples and document possible water quality violations caused by runoff from the zinc smelting spoil on the site. Previous site visits had been made on September 22 and November 19, 1981, and limited sampling indicated possible cadmium, iron, lead, zinc, and copper violations from site runoff.

Sample locations are shown on the attached area map, and a tabulation of the sample results is also attached. The samples indicate that discharges from the site contribute to water quality violations for iron and zinc. In both cases, the samples taken in a location believed to be upstream of any plant runoff contained concentrations in excess of water quality standards. Since there is no other known sources of these contaminants in the area, this location may also receive runoff from the plant site.

Based on this and previous surveys, runoff from the Sherwin-Williams plant site appears to be causing or contributing to water quality violations for dissolved metals. In addition, orange deposits in the pond on the plant property and in the stream downstream of the plant appear to be precipitated iron, violating Rule 203(a) of Chapter 3. A letter will be sent to the company noting these apparent violations.

It was also learned during the visit that sanitary wastes from the plant are treated in a septic system with no reported surface discharge.

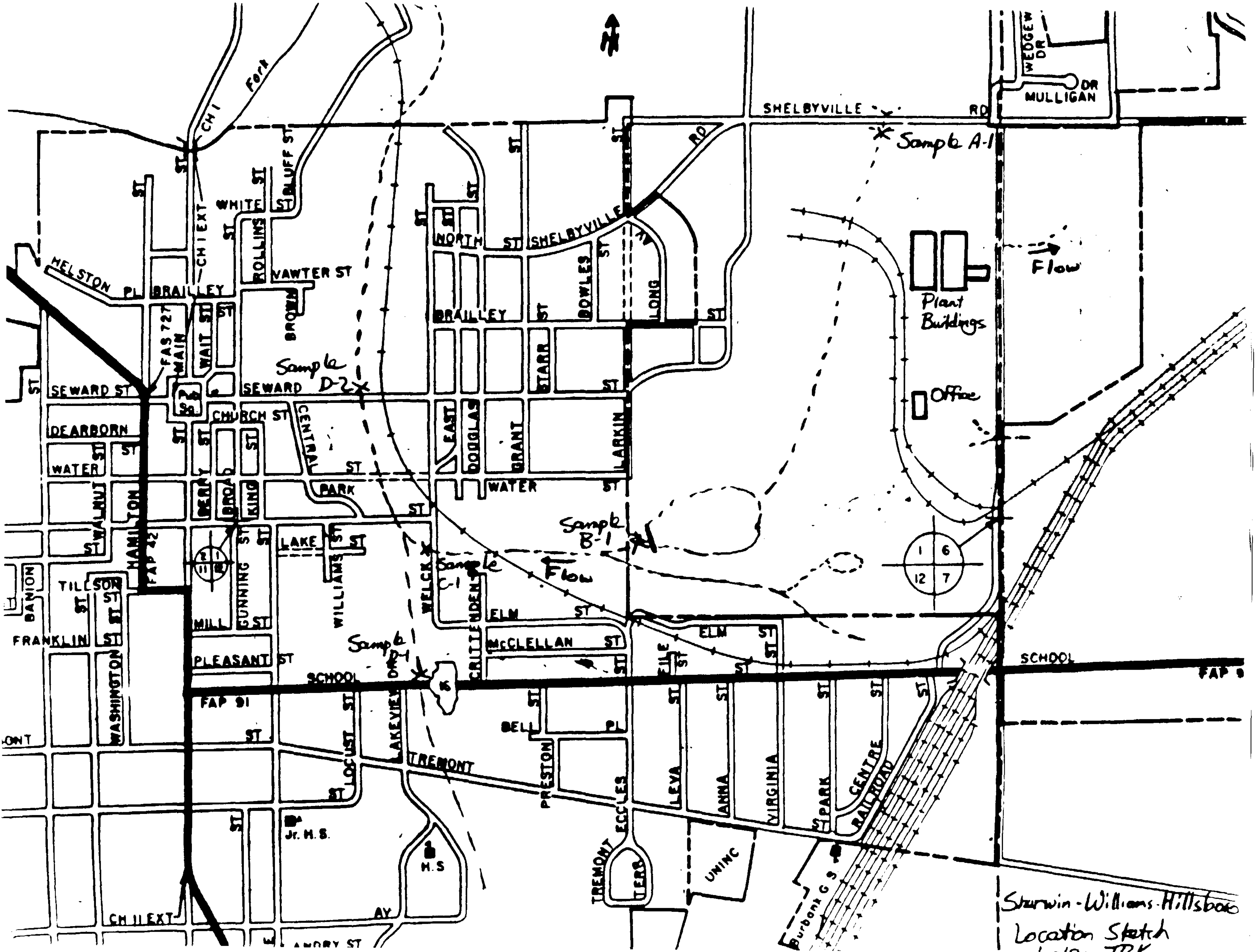
JJF JJF/TRK/mh
6-7-82

cc: Region V Springfield

Sherwin-Williams Sampling

March 23, 1982

Parameter	Station A-1	B-1	C-1	D-1	D-2	Rule 203(f)
TS/EC	300	460	580	300	380	1000
pH	7.1	7.5	7.1	7.7	7.5	6.5-9
R.O.E.	329	514	650	321	450	-----
Arsenic	0.001	0.001	<0.001	0.001	<0.001	1.0
Barium	0.1	0.1	<0.1	0.1	0.1	5.0
Boron	0.2	0.3	0.5	0.3	0.4	1.0
Cadmium	<0.005	<0.005	0.01	<0.005	0.005	0.05
Copper	<0.01	<0.01	<0.01	<0.01	<0.01	0.02
Chromium (Tot.)	<0.05	<0.05	<0.05	<0.05	<0.05	1.05
Chromium (Hex.)	0.0	0.0	0.0	0.0	0.0	0.05
Iron	**2.3**	**1.8**	**2.8**	**1.9**	**0.68**	**1.0**
Lead	<0.05	<0.05	<0.05	<0.05	<0.05	0.1
Manganese	1.7	0.37	0.46	0.22	0.49	1.0
Nickel	<0.05	<0.05	<0.05	<0.05	<0.05	1.0
Selenium	<0.001	<0.001	<0.001	<0.001	<0.001	1.0
Silver	<0.005	<0.005	<0.005	<0.005	<0.005	0.005
Zinc	**3.6**	**2.2**	**8.7**	**<0.05**	**6.3**	**1.0**



Sherwin-Williams-Hillsboro
Location Sketch
Sample A-1
Sample B-1
Sample C-1
Sample D-1
Sample D-2
Flow
Plant Buildings
Office
SHELBYVILLE RD
MULLIGAN DR
WEDGEW DR
SCHOOL
FAP 9
FAP 91
FAP 42
FAS 727
HAMILTON
SEWARD ST
CHURCH ST
CENTRAL
PARK
WATER
LARKIN
GRANT
DOUGLAS
EAST
STARR
BOWLES
LONG
BRAILLEY
NORTH
CRITTENDEN
McCLELLAN
ELM
WELCK
WILLIAMS
LAKE
GUNNING
KING
BROAD
BERRY
MILL
PLEASANT ST
TILLSON
FRANKLIN
WASHINGTON
BANION
WALNUT
DEARBORN
LOCUST
LAKEVIEW DR
TREMONT
PRESTON
BELL PL
ECCLES
TERR
LEVA
ANNA
VIRGINIA
PARK
CENTRE
RAILROAD
UNINC
Burbank G S
Jr. H. S.
H.S
CH I EXT
CH II EXT
HELSTON PL
WHITE
ROLLINS
VAWTER ST
BROWN
BLUFF ST
WAIT ST
MAIN
Pub Sq.
Fork